REMARKS/ARGUMENTS

Claim Amendments

The Applicant has amended claims 2 and 13. Applicant respectfully submits no new matter has been added. Accordingly, claims 1-16 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

Claim Rejections – 35 U.S.C. § 103 (a)

Claims 1-4, 7-8, 10-11, 13-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Admitted Prior Art (hereinafter AAPA) in view of Bhaumick (2004/0248546). The Applicant respectfully traverses the rejection of these claims.

The Applicant respectfully directs the Examiner's attention to claim 11.

> 11. (Previously Presented) A network node for a telecommunications network comprising an input unit for receiving unstructured supplementary service data from at least one mobile station, comprising
>   a processing unit for processing said service data, and
>   means for maintaining location information of said at least one mobile station, wherein <u>said processing unit is arranged for including said location information of said at least one mobile station in said service data</u>. (emphasis added)

The Applicant respectfully submits that AAPA and Bhaumick, whether individually or in combination, fail to disclose all the elements of claims 11.

The main advantage of the Applicant's invention is that by sending the USSD for a service request, the MS is transmitting anyhow and the MS position is measured and becomes available at the MSC. The airtime consuming method of Bhaumick for regular updating is avoided and the MS does not require dedicated logic as disclosed in the AAPA.

The Bhaumick reference discloses an alternative to the known paging methods as stated in 3GPP TS 25.305 together with the base mechanism for MAP-ATI (Any Time Interrogation) and MAP -PSI (provide subscriber information) 3GPP TS 23.078

and 29.002. MAP-PSI is used by the HLR to send a request to a MSC for an update of specific data of a mobile station. By including active an paging parameter in MAP-PSI the MSC will measure the MS position by means of one of the methods stated in 3GPP 25.305 and report back to the HLR. Basic for all methods is that the mobile station transmits, which enables the mobile network to measure the MS position. This is also what Bhaumick basically does, causing the MS to transmit without user intervention only now with an alternative method not described in the standard. Note that the standard defined way is also fully automatic and does not require user intervention.

Bhaumick uses an USSD message (or SMS or MMS) including an error causing the MS to automatically reply with an error report. Transmitting the report the mobile network can now measure the position of the mobile station. Bhaumick discloses in paragraph [0008] that the base station stores the location measured when the error report is transmitted. After that, standard mechanisms are used as available and as indicated in paragraph [0008], no other modifications are required to MS, HLR or VLR. For base station MSC this is included in the BTAP protocol. From MSC to HLR/VLR this is MAP-PSI. It should be noted that when requesting MAP-PSI by the HLR a parameter can be set for regular update or update when changed, causing the MSC to report when ever location data is changed.

A person skilled in the art attempting to combine both teachings would likely avoid the MS including position information in the USSD message being sent to the handling service. If the service is in a separate service handler MAP-ATI can be used towards an HLR to get the position information. The Applicant respectfully submits that the MSC does not include position data in a USSD service request message passing through it.

The Applicant would also like to point out that an MSC to MSC handover as stated on page 4, lines 3-6 is incorrect. Bhaumick is cited as supporting the statement that "…when a mobile leaves the geographical area covered by an MSC and enters the area covered by another MSC, the data record for the mobile station is transferred to the other MSC by means of USSD message." (para [0019], lines 75-107). First, the 3GPP standard requires that the MSC/VLR handover mechanism is based on MAP

handover messages not USSD messages. Second, the Applicant respectfully submits that Bhaumick does not disclose the data record being handed over through use of USSD. The Applicant also suspects that a combination of sentences in Bhaumick is used to provide support for the rejection in the Detailed Action. The first sentence, "When a mobile radio apparatus 1 leaves the geographical area covered by an MSC 100 and enters the area covered by an other MSC 100 the data record allocated to the mobile radio apparatus 1 is loaded into the VLR 4 allocated to the new MSC.", and a second sentence following the first sentence states; "According to the invention, one or more USSD, SMS, or MMS messages are generated for this purpose by means of an updating module 3, which messages, according to GSM standard, produce an error report upon reception by the mobile radio apparatus 1."

Between the first sentence and the "second" sentence is a further sentence which the Applicant asserts is the subject matter to which the second sentence is referring: "For location-based services over a GSM mobile radio network, the location of a mobile radio apparatus 1 in the GSM mobile radio network is determined based upon the individual cells 400 of base stations 300 of the mobile radio network for updating location information of the mobile radio apparatus 1." Standard sentence construction would require that the term "this purpose" in the second sentence refers to the subject immediately preceding "this purpose". The Applicant respectfully asserts that the second sentence is referring to the subject matter in the sentence immediately preceding the "second" sentence, as described above; that of determining the location of a mobile radio apparatus not transferring the data record for the mobile station from one MSC to another using USSD.

As provided in MPEP § 2143, "[t]o establish a prima facie case of obviousness, ... the prior art reference (or references when combined) must teach or suggest all the claim limitations." In that regard, the Applicant respectfully submits that the Examiner's two references still fail to teach or suggest each and every element of the presently pending independent claims.

The Applicant respectfully submits that the examiner has not produced a prima facie case of obviousness and the allowance of claim 11, analogous claim 1 and the respective dependent claims 2-4, 7-8, 10, and 13-16 is respectfully requested.

Claims 5-6 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Admitted Prior Art (hereinafter AAPA) in view of Bhaumick (2004/0248546) further in view of Koster (2005/0009499) (hereinafter Koster). The Applicant respectfully traverses the rejection of these claims.

The Koster reference is cited for teaching systems and methods for billing a mobile wireless subscriber for location services. The Applicant respectfully submits that Koster does not teach the limitation missing from the Bhaumick reference and AAPA; that of a MS sending a USSD service request and the position is automatically determined and is available at the MSC. The MSC can easily provide a requested service that is dependent on location because it already has the location.

Claims 5, 6 and 12 depend from claims 1 and 11 directly or indirectly and recite further limitations in combination with the novel elements of claims 1 and 11. Therefore, the allowance of claims 5, 6 and 12 is respectfully requested.

Claim 9 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Admitted Prior Art (hereinafter AAPA) in view of Bhaumick (2004/0248546) further in view of Elliott et al (2008/0095339) (hereinafter Elliott). The Applicant respectfully traverses the rejection of these claims.

The Elliott reference is cited for teaching transferring billing information across telephone switches with a time offset to account for different time zones and daylight savings time changes. The Applicant respectfully submits that Elliott does not teach the limitation missing from the Bhaumick reference and AAPA; that of a MS sending a USSD service request and the position is automatically determined and is available at the MSC. The MSC can easily provide a requested service that is dependent on location because it already has the location.
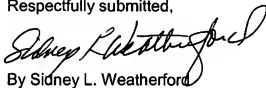
Claim 9 depends from amended claim 1 and recites further limitations in combination with the novel elements of claim 1. Therefore, the allowance of claim 9 is respectfully requested

CONCLUSION

In view of the foregoing remarks, the Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for all pending claims.

The Applicant requests a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,

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